



Era Aviation, Inc.

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## PROCESS SPECIFICATION

ERAAVIATIONINC.

GULF COAST DIVISION  
LAKE CHARLES, LOUISIANA

PROCESS SPECIFICATION NO. 4010

412 AUXILIARY FUEL TANKS

APPLICATION OF NON SKID SURFACE TO FIBERGLASS REINFORCED PLASTIC

Prepared By: *Dave Murphy* Date: 8-3-90  
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Approved By  
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ERA P S 4010REV IDATE 8/3/90**SCOPE**

This specification outlines the requirements for application of a nonskid surface on the exterior of a fiberglass reinforced plastic product.

**CONFORMATION**

This specification does not conform to any existing government specification.

**SUBCONTRACTORS**

MESH COMPOSITES, INC. of Lake Charles, LA., not its' subcontractor shall be the only subcontractors qualified to construct the FRP requirements and shall comply with this process specification. Any deviations or variations are to be submitted to ERA for approval with proper documentation prior to fabrication.

**CONFLICTS**

In the event of a conflict with engineering drawing(s) and this specification, the drawing(s) shall govern.

### NON SKID SURFACE

1. Locate area where the non-skid surface is to be installed. Scuff the entire area using a DA sander and 40g DA paper. Overscuff the area a minimum of .25 per side to allow for top coat sealing of non skid surface.
2. Tape the outline of the skid surface to the desired shape.
3. Apply a coat of the gel-coat mixture, which consist of clear gel- and Gp resin with a 1 to 1 mixing ratio containing pigment, to the area which has been taped off.
4. Before the mixture starts to set, sprinkle a layer of sand over the area previously coated. Allow to cure until hard. Refer to drawing for appropriate grit type.
5. Using a 3" brush, lightly wipe away any loose sand from the area. Remove all outline tape as installed in step 4. Using a 3" brush, lightly wipe away any loose sand from the surface.
6. Remask the nonskid surface by extending the tape lines a minimum of .25 away from the non skid surface. See Figure 1.
7. Prepare a coat of Gp resin by mixing 1 oz. of pigment to 1 pound of resin and 5-10 cc's of wax styrene. Apply the mixture by lightly brushing over the sand coated surface.
8. Remove all tape before resin cures.

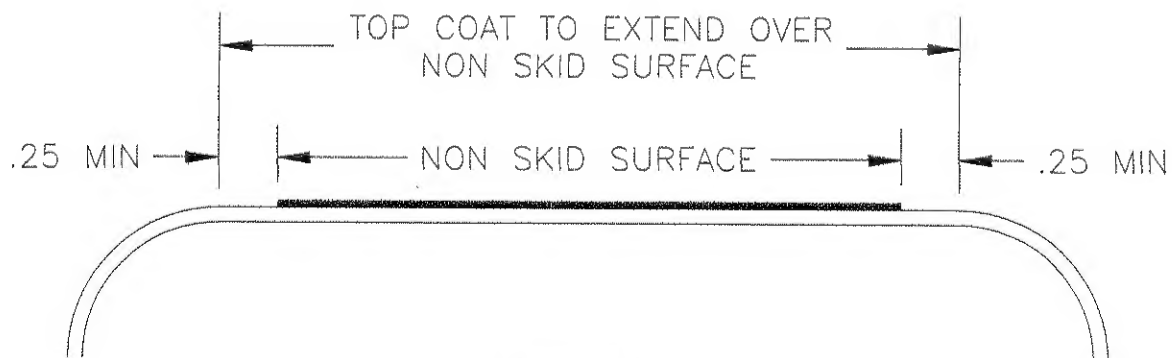


FIGURE 1

ERA P S 4010REV ADATE 2/5/91**MATERIALS****NAME****MANUFACTURER**RESIN, General Purpose  
(GP)

33-091

Reichold Chemicals  
Houston, TX

MEKP Catalyst

Hi-Point 90

Witco Chemical  
Richmond, CA

UV Inhibitor

UV-9

Industrial Chemical  
Atlanta, GA

Pigment

CoPlas pigment

CoPlas  
Fort Smith, AR

Spartan pigment

Spartan Pigments  
Houston, TX

Gel Coat

Gel Coay

CoPlas  
Fort Smith, ARSand  
(see Drawing for  
grit size)  
Grit: Fine

SSC Blasting Sand

S.S.C..SAND  
Houston, TXMedium  
Coarse

Paraffinated Styrene

TF-100

Industrial Chemical  
Atlanta, GA

ERA P S 4010 REV I DATE 8/3/90

### INSPECTION

It is the purpose of the inspection to verify that each part has been fabricated in accordance with and meets the requirements of this specification.

#### RESPONSIBILITIES:

IT IS THE RESPONSIBILITY OF THE FABRICATOR TO MAKE AVAILABLE TO ERA HELICOPTER OF ITS AUTHORIZED REPRESENTATIVE ANY OF ALL THE FOLLOWING:

#### RECORDS:

Records pertaining to the part(s) being purchased shall be supplied when requested. These may include:

- Materials specifications
- Equipment drawings or mold jig
- Materials test results
- Dimensional verification reports
- Rework and repair reports

#### MATERIALS:

Raw material used shall be virgin materials and shall be visually free of contaminants.

#### FABRICATED PARTS:

The part to be inspected shall be properly located and positioned, and shall be in condition to permit a thorough inspection. Reasonable means shall be provided to permit the inspector to visually examine the entire non skid surface of the part.

Allowable defects are listed on page 5.

ERA P S 4010

REV I

DATE 8/3/90 .

**TEST OF FINISHED PARTS:**

The following basic tests shall be included as a minimum in the acceptance inspection:

Surface Cure Test - A rag and an acetone squeeze bottle with acetone shall be provided to determine if the resin has fully cured. The procedure for this is to rub a few drops of acetone on the surface and check for tackiness after the acetone has evaporated. Persistent tackiness indicates an incomplete cure.

Dimensions - The inspector shall be provided with copies of all approved drawings or patterns

**APPLICABLE DOCUMENTS:****ASTM Standards**

C 581-74 - Test Method for Chemical Resistance of Thermosetting Resins used in Glass Fiber Reinforced Structures

D 638-77a - Test Method For Tensile Properties of Plastics

D 883-78a - Definitions of Terms Relating to Plastics

**ALLOWABLE DEFECTS**

<u>Defect</u>	<u>Allowable for Surface</u>
Exposed scuffed area (ie. - not covered with resin/sand)	None
Sand not coated with waxed resin	None
Non cured areas	None